## COMBINED DECLARATION / POWER OF ATTORNEY

name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and to five matter that is sought on the invention METHOD AND APPARATUS FOR ESTIMATING CHANNEL CHARACTERISTICS USING PILO AND NON-PILOT DATA the specification of which:	AS BELOW NAMED INVENTOR	R, I HEREBY DECLARE THA	AT: This Declaration is of the following	type:	
AND NON-PILOT DATA the specification of which:		☐ Supplemental		Divisional	l
was filed on April 4, 2001 as Serial No.  was amended on (if applicable).  was described and claimed in PCT International Application No. filed on and as amended under PCT Article 19 on .  I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by an amendment referred to above. I acknowledge the duty to disclose information which is material to the examination of this application in accordan with Title 37, Code of Federal Regulations, Sec. 1.56(a).  I hereby claim foreign priority benefits under Title 35, United States Code, Sec. 119 of any foreign application(s) for patent or inventor's certificate or any PCT International application(s) designating at least one country other than the United States of America listed below and have all identified below any foreign application(s) for patent or inventor's certificate or any PCT International application(s) of which priori is claimed.    Priority Claimed   Pri	name is listed below) or an original patent is sought on the invention	l, first and joint inventor (if plots)  METHOD AND APPARA	ural names are listed below) of the subje	ect matter which is clai	med and for which a
amendment referred to above. I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Sec. 1.56(a).  I hereby claim foreign priority benefits under Title 35, United States Code, Sec. 119 of any foreign application(s) for patent or inventor's certificate or any PCT International application(s) designating at least one country other than the United States of America listed below and have all identified below any foreign application(s) designating at least one country other than the United States of America listed below and have all identified below any foreign application(s) designating at least one country other than the United States of America listed below and have all identified below any foreign application(s) designating at least one country other than the United States of America listed below and have all identified below and priority of the United States application (s) designating at least one country other than the United States application in the manner provided by the first paragraph of Title 35 USC 112 acknowledge the duty to disclose material information as defined in Title 37 CFR 1.56(a) which occurred between the filing date of the prapiplication and the national or PCT International filing date of this application:	was filed on April 4, 2001 at was amended on (if a	oplicable).	n No. filed on and as amen	ded under PCT Article	19 on .
or of any PCT International application(s) designating at least one country other than the United States of America Insted below any foreign application(s) for patent or inventor's certificate or any PCT International application(s) designating at least one count other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priorisis claimed.  Priority Claimed  Priority Claimed  (Country)  (Application No.)  (Day/Month/Year/Filed)  (Yes)  (No)  Thereby claim the benefit under Title 35 USC 119(e) of any United States provisional application(s) listed below:  60/264,621  January 26, 2001  (Filing Date)  hereby claim the benefit under Title 35 USC 120 of the United States application(s) listed below, and insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35 USC 112 application and the national or PCT International filing date of this application:  (Setup)	amendment referred to above. I a	knowledge the duty to disclos	ts of the above-identified specification, e information which is material to the ex-	including the claims, kamination of this appli	as amended by any ication in accordance
(Country) (Application No.) (Day/Month/Year/Filed) (Yes) (No)  thereby claim the benefit under Title 35 USC 119(e) of any United States provisional application(s) listed below:  60/264,621 January 26, 2001  (Serial No.) (Filing Date)  Thereby claim the benefit under Title 35 USC 120 of the United States application(s) listed below, and insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35 USC 112 acknowledge the duty to disclose material information as defined in Title 37 CFR 1.56(a) which occurred between the filing date of the prior prior application and the national or PCT International filing date of this application:	or of any PCT International appli identified below any foreign appli other than the United States of An	ication(s) designating at least	one country other than the United Stars's certificate or any PCT International ap-	oplication(s) designating	g at least one country
hereby claim the benefit under Title 35 USC 119(e) of any United States provisional application(s) listed below:  60/264,621  January 26, 2001  (Serial No.)  (Filing Date)  Thereby claim the benefit under Title 35 USC 120 of the United States application(s) listed below, and insofar as the subject matter of each of the selaims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35 USC 112 acknowledge the duty to disclose material information as defined in Title 37 CFR 1.56(a) which occurred between the filing date of the prior policies of the prior United States application:				Priority C	Claimed
(Serial No.)  (Filing Date)  Thereby claim the benefit under Title 35 USC 120 of the United States application(s) listed below, and insofar as the subject matter of each of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35 USC 112 acknowledge the duty to disclose material information as defined in Title 37 CFR 1.56(a) which occurred between the filing date of the prior prior united States application and the national or PCT International filing date of this application:	(Country)	(Application No.)	(Day/Month/Year/Filed)	(Yes)	(No)
(Serial No.)  (Filing Date)  Thereby claim the benefit under Title 35 USC 120 of the United States application(s) listed below, and insofar as the subject matter of each of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35 USC 112 acknowledge the duty to disclose material information as defined in Title 37 CFR 1.56(a) which occurred between the filing date of the prior application and the national or PCT International filing date of this application:	hereby claim the benefit under T	itle 35 USC 119(e) of any Uni	ted States provisional application(s) liste	d below:	
relaims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 33 USC 112 acknowledge the duty to disclose material information as defined in Title 37 CFR 1.56(a) which occurred between the filing date of the price prior and the national or PCT International filing date of this application:	(Serial No.)		(Filing Date)		
(Serial No.) (Filing Date) (Status)	claims of this application is not disclosed	sclosed in the prior United State material information as defi	ates application in the manner provided to the need in Title 37 CFR 1.56(a) which oc	oy the first paragraph o	1 Tille 33 USC 112, 1
	(Serial No.)		(Filing Date)	(Statu	s)

I hereby appoint the following attorneys and/or agents to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith: Russell B. Miller, Reg. No. 31,122, Gregory D. Ogrod, Reg. No. 30,880, Bruce W. Greenhaus, Reg. No. 37,339, Charles D. Brown, Reg. No. 28,285, Thomas R. Rouse, Reg. No. 40,793, Kent D. Baker, Reg. No. 38,822, Thomas M. Thibault, Reg. No. 42,181, Tom Streeter, Reg. No. 32,007, Christopher O. Edwards, Reg. No. 36,127, Pavel Kalousek, Reg. No. 44,178, Kyong H. Macek, Reg. No. 42,977, Byron Yafuso, Reg. No. 45,244, Raymond B. Hom, Reg. No. 44,773, Sean English, Reg. No. 37,319, Roger W. Martin, Reg. No. 39,291, Sandip S. Minhas, Reg. No. 44,945, Michael D. Hartogs, Reg. No. 36,547, Philip R. Wadsworth, Reg. No. 29,219, S. Hossain Beladi, Reg. No. 42,311, Albert J. Harnois, Reg. No. 46,123, Sandra L. Godsey, Reg. No. 42,589, George C. Pappas, Reg. No. 35,065, Maryanne E. DeAngelo, Reg. No. 47,288 and Abdollah Katbab, Reg. No. 45,325. Please direct all telephone calls to Philip R. Wadsworth at (858) 651-4404 and address all correspondence to: Sarah Kirkpatrick, Manager, Intellectual Property Administration, QUALCOMM Incorporated, 5775 Morehouse Drive, San Diego, California 92121-1714.

## COMBINED DECLARATION / POWER OF ATTORNEY

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Inventor Signature	Date	
mitomor organica		
	Civinantia	
	Citizenship	
Inventor Signature	Date	
	Citizenship	
Rajesh Sundaresan Residence		
	Inventor Signature  Inventor Signature	